Based Upon: PCT/RU2004/000367

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A system comprising ~~consisting of the following~~ hermetic parts[[,]] connected via channels with valves installed in ~~those~~ the channels for providing flow of ~~the~~ a biological fluid through the system from ~~the~~ an inlet socket to ~~the~~ an outlet socket[[:]], a vessel for a ferreed sorbent, chambers for mixing [[of]] the ferreed sorbent with the biological fluid and precipitation of the ferreed sorbent out of the biological fluid, ~~and~~ a filtering device connected with ~~the~~ an outlet channel of ~~the~~ a precipitation chamber and with the outlet ~~system output~~ socket~~, distinguishing by that the~~, a mixing chamber, the precipitation chamber and the vessel for the ferreed sorbent ~~are performed with the possibility to change their~~ having variable capacities and ~~equipped with~~ a corresponding driving gear, ~~while~~ the mixing chamber for mixing the ferreed sorbent with the biological fluid and the chamber for precipitation of the ferreed sorbent out of the ~~above~~ fluid ~~are~~ made as ~~in the form of~~ vessels having ~~either~~ one of hard-jointed lids or a mutual ~~one~~ lid, ~~as well as~~ a mutual wall fixed to ~~the~~ bottoms of ~~those~~ the chambers[[,]] which is made ~~in the form of~~ as an interchamber partition[[;]] ~~here the~~, inner cavities of ~~those~~ the chambers ~~are~~ connected through a channel in the ~~above~~ partition~~; here the~~ and other side walls of ~~those~~ the chambers ~~have~~ having corrugations forming corresponding silphons, and the chamber lids ~~are~~ fixed on the interchamber partition via hinges [[(]]with a possibility to rotate around ~~the~~ a hinge ~~axe); here the~~ axis, a ferreed sorbent vessel

[[is]] installed inside the mixing chamber ~~mixing~~ of the ferreed sorbent with the biological fluid and made ~~in the form of e.g.~~ as a cylinder with a silphon-type corrugated side wall surface~~, at that one~~ and a butt-end of the cylinder [[is]] fixed on the bottom of the chamber for mixing the ferreed sorbent with the biological fluid, ~~and~~ the other butt-end ~~is equipped with~~ having a lid fixed on the chamber lid~~; here~~, magnets ~~are~~ installed on the bottom of the chamber for the ferreed sorbent precipitation, and the system inlet socket [[is]] simultaneously connected with both the mixing chamber inner cavities and the vessel for the ferreed sorbent[[,]] which is connected with the mixing chamber inner cavity.

2. (Currently Amended) The system of claim 1 wherein ~~System as per paragraph 1, distinguishing by that~~ the lids of the mixing chamber and the precipitation chamber are located in one plane.

3. (Currently Amended) The system of claim 1 wherein ~~System as per paragraph 1, distinguishing by that~~ the lids of the mixing chamber and the precipitation chamber are connected in ~~the~~ a form of an angle-shape~~, e.g. V-shape profile in section~~.

4. (Currently Amended) The system of claim 3 wherein ~~System as per any of paragraphs 1-3, distinguishing by that the~~ corps formed by

the mixing chamber and the precipitation chamber in a plane[[,]] is ~~performed e.g.~~ in ~~the~~ a form of ~~either~~ one of a rectangle with rounded corners, ~~or as~~ a circle, ~~or as~~ an ellipse, ~~or as~~ and a ~~figure-of-eight~~ figure-eight shape.

5. (Currently Amended) The system of claim 3 wherein ~~System as per any of paragraphs 1-3, distinguishing by that~~ the bottoms of the chambers for the ferreed sorbent mixing and precipitation are hard-fixed on the interchamber partition.

6. (Currently Amended) The system of claim 3 wherein a ~~System as per any of paragraphs 1or 3, distinguishing by that the~~ hinge ~~jointing~~ joining the lid with the interchamber partition is installed in ~~the~~ a corner of ~~its~~ a profile.

7. (Currently Amended) The system of claim 3 wherein ~~System as per any of paragraphs 1-3, distinguishing by that~~ the bottoms of the chambers for the ferreed sorbent mixing and precipitation are fixed on the interchamber partition ~~with the possibility to rotate in the~~ and are rotatable in a lid rotation plane.

8. (Currently Amended) The system of Claim 3 wherein ~~System as per any of paragraphs 1-3, distinguishing by that~~ capacities of [[the]] inner cavities of the chambers for the ferreed sorbent mixing and precipitation are ~~designed~~ in [[the]] a proportion of one of 1:1, [[or]] 1:~~(0,1-0,9)~~ (0.1-0.9), ~~or (0,1-0,9)~~ and (0.1-0.9): 1 ~~correspondingly,~~ and [[the]] capacities of inner cavities of the mixing chamber and the vessel are ~~designed~~ in [[the]] a second proportion of 1:~~(0,1-0,9)~~ (0.1-0.9).

9. (Currently Amended) The system of claim 1, wherein ~~System as per paragraph 1, distinguishing by that~~ the vessel for ferreed sorbent is installed inside the mixing chamber at [[the]] a distance of at least (l-100)d from the side wall of the above chamber[[,]] and at least (10-100)d from the interchamber partition, where d [[–]] is an inner diameter of the channel connecting the inlet socket with the inner cavity of the mixing chamber.

10. (Currently Amended) The system of claim 9 wherein ~~System as per any of paragraphs 1or 9, distinguishing by that~~ the channel from the inlet socket is input into the mixing chamber ~~either~~ through one of the chamber bottom~~, or through its~~ and the lid.

11. (Currently Amended) The system of claim 10 wherein ~~System as per paragraph 10, distinguishing by that~~ the channel from the inlet socket is input into the mixing chamber at [[the]] an angle of (10-80)° to [[the]] a bottom plane and, respectively, to the chamber lid and a vertical line.

12. (Currently Amended) The system of claim 9 wherein ~~System as per any of paragraphs 1 or 9, distinguishing by that~~ the channel from the inlet socket is input into the vessel through the vessel lid, and the output channel going from the vessel to the mixing chamber is installed [[e.g.]] in ~~the lower part of~~ the vessel and the mixing chamber side walls at the distance of ~~(0,5-50)d~~ (0.5-50)d from the mixing chamber bottom, where [[d-]] d is the channel diameter.

13. (Currently Amended) The system of claim 9 wherein ~~System as per any of paragraphs 1 or 9, distinguishing by that~~ the channel between the chambers for the ferreed sorbent mixing and precipitation is installed in the interchamber partition at [[the]] a distance of ~~(0,5-50)d~~ (0.5-50)d from the chambers bottoms, where [[d-the]] d is a channel diameter.

14. (Currently Amended) The system of claim 9 wherein ~~System as per any of paragraphs 1 or 9, distinguishing by that~~ the channel between the chambers for the ferreed sorbent mixing and precipitation is installed in the

interchamber partition at the angle of (10-60)° to the bottom of precipitation chamber and the interchamber partition.

15. (Currently Amended) The system of claim 9 wherein ~~System as per any of paragraphs 1 or 9, distinguishing by that~~ the output channel from the precipitation chamber is installed ~~either~~ in one of the chamber lid~~, or in~~ and an [[the]] upper part of the chamber side wall at [[the]] a distance of ~~(0,5-50)d~~ (0.5-50)d from the lid, where d is a [[– the]] channel diameter.

16. (Currently Amended) The system of claim 1 wherein ~~System as per paragraph 1, distinguishing by that the~~ magnets are installed ~~either~~ at least one of inside the precipitation chamber, [[or]] outside of the above chamber, [[or]] and both inside and outside the precipitation chamber, and ~~they~~ are fixed on the bottom of the above chamber.

17. (Currently Amended) The system of claim 1 wherein ~~System as per paragraph 1, distinguishing by that~~ the driving gear for changing capacities of the chambers for the ferreed sorbent mixing and precipitation and of the vessel is performed ~~in the form of e.g.~~ by an electric motor[[,]] connected with the lid [[e.g.]] through one of a reducing gear [[or]] and a tappet gear, or in [[the]] a form of a reducing gear fixed on the outlet socket [[e.g.]] at [[the]] an angle of

(30-45)° to the disc shaft [[axe,]] axis, alternatively interacting with the chamber lids while the shaft rotates.

18. (Currently Amended) The system of claim 1 wherein ~~System as per paragraph 1, distinguishing by that~~ the driving gear for changing capacities of the chambers for the ferreed sorbent mixing and precipitation and of the vessel is ~~performed in the form of~~ a tappet gear connected with the lid, functioning with the possibility of ~~using operator's~~ a manual action.

19. (Currently Amended) The system of claim 1 wherein ~~System as per paragraph 1, distinguishing by that~~ the driving gear is performed with ~~the possibility of operator's~~ a manual action directly on the lid.

20. (Currently Amended) The system of claim 19 wherein a ~~System as per any of paragraphs 1 or 17-19, distinguishing by that the~~ spot one of above the mixing chamber corrugated side wall ~~or the spot~~ and above the precipitation chamber corrugated side wall ~~were chosen as~~ is the driving gear application spot.

21. (Currently Amended) The system of claim 20, wherein ~~System as per any of paragraphs 1 or 9, distinguishing by that the~~ diameters of

input channels going into the mixing chamber and the vessel are chosen in a [[the]] proportion of d/d1 = V/V_1, where d [[–]] is an inner diameter of the channel going into the mixing chamber, [[*d1* –]] d1 is an inner diameter of the channel going into the vessel, V [[– the]] is a mixing chamber capacity, and V_1 [– the]] is a vessel capacity.

22. (Currently Amended) The system of claim 1 wherein ~~System as per paragraph 1, distinguishing by that~~ the walls of the vessel, the mixing chamber and the precipitation chamber and the partition between the above chambers, as well as the lid and the bottom are made of [[e.g.]] polyurethane.

23. (Currently Amended) The system according to claim 22, wherein ~~System as per any of paragraphs 1 or 22, distinguishing by that~~ the corrugation in the vessel and the chambers for the ferreed sorbent mixing and precipitation is made at ~~(0,5-0,95)~~ (0.5-0.95) of a height of [[the]] a respective wall ~~walls~~.

24. (New) The system of claim 1 wherein corps formed by the mixing chamber and the precipitation chamber in a plane is in a form of one of a rectangle with rounded corners, a circle, an ellipse, and a figure-eight shape.

25. (New) The system of claim 1 wherein the bottoms of the chambers for the ferreed sorbent mixing and precipitation are hard-fixed on the interchamber partition.

26. (New) The system of claim 1 wherein a hinge joining the lid with the interchamber partition is installed in a corner of a profile.

27. (New) The system of claim 1 wherein the bottoms of the chambers for the ferreed sorbent mixing and precipitation are fixed on the interchamber partition and are rotatable in a lid rotation plane.

28. (New) The system of Claim 1 wherein capacities of inner cavities of the chambers for the ferreed sorbent mixing and precipitation are in a proportion of one of 1:1, 1:(0.1-0.9), and (0.1-0.9):1 and capacities of inner cavities of the mixing chamber and the vessel are in a second proportion of 1:(0.1-0.9).

29. (New) The system of claim 1 wherein the channel from the inlet socket is input into the mixing chamber through one of the chamber bottom and the lid.

30. (New) The system of claim 29 wherein the channel from the inlet socket is input into the mixing chamber at an angle of (10-80)° to a bottom plane and, respectively, to the chamber lid and a vertical line.

31. (New) The system of claim 1 wherein the channel from the inlet socket is input into the vessel through the vessel lid, and the output channel going from the vessel to the mixing chamber is installed in the vessel and the mixing chamber side walls at the distance of (0.5-50)d from the mixing chamber bottom, where d is the channel diameter.

32. (New) The system of claim 1 wherein the channel between the chambers for the ferreed sorbent mixing and precipitation is installed in the interchamber partition at a distance of (0.5-50)d from the chambers bottoms, where d is a channel diameter.

33. (New) The system of claim 1 wherein the channel between the chambers for the ferreed sorbent mixing and precipitation is installed in the interchamber partition at the angle of (10-60)° to the bottom of precipitation chamber and the interchamber partition.

34. (New) The system of claim 1 wherein the output channel from the precipitation chamber is installed in one of the chamber lid and an upper part of the chamber side wall at a distance of (0.5-50)d from the lid, where d is a channel diameter.

35. (New) The system of claim 1 wherein a spot one of above the mixing chamber corrugated side wall and above the precipitation chamber corrugated side wall is the driving gear application spot.

36. (New) The system of claim 1, wherein diameters of input channels going into the mixing chamber and the vessel are chosen in a proportion of $d/d1 = V/V_1$, where d is an inner diameter of the channel going into the mixing chamber, d1 is an inner diameter of the channel going into the vessel, V is a mixing chamber capacity, and V_1 is a vessel capacity.

37. (New) The system of claim 1 wherein the corrugation in the vessel and the chambers for the ferreed sorbent mixing and precipitation is made at (0.5-0.95) of a height of a respective wall.